PROGRESSIVE ADAPTIVE TIME STAMP RESOLUTION IN MULTIMEDIA AUTHORING

ABSTRACT OF THE DISCLOSURE

Environments with unreliable delivery may result in faltering
5   presentation of multimedia objects, due to missing time stamp deadlines. This
may be alleviated by introducing more flexible time stamping. To avoid this,
additional MPEG-4 object time information is sent to the client. This requires
a new dedicated descriptor, carried in the Elementary Stream Descriptor. The
new more flexible timing information will have two features. First, instead of
10   fixed start and end times, the duration of an object can be given a range. And
second, the start and end times are made relative to other multimedia object
start and end times. This information can then be used by the client to adapt
the timing of the ongoing presentation to the environment, while having more
room to stay within the presentation author's intent and expectations.